ABSTRACT OF THE DISCLOSURE

In a vehicle generator control which detects an abnormal operating condition of a generator of a vehicle, and includes a transistor which drives a charging lamp to emit a warning indication when such a condition is detected, with the value of a quantity indicative of the flow of current through the charging lamp drive transistor being compared with a reference value, and with the transistor being set in a non-conducting state if the reference value is exceeded, a succession of respectively decreasing reference values is periodically generated. A timing of an initial flow of current through the charging lamp is controlled to be synchronized with the start of such a succession, so that the peak value of an initial surge current which flows through the charging lamp drive transistor is compared with the highest reference value. Complete protection can thereby be established for the charging lamp drive transistor against a flow of short-circuit current which would exceed any of the reference values.